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| APPLICATION NO.                                 | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/710,507                                      | 07/16/2004  | Yaote Huang          | LITP0029USA         | 4506             |
| 27765   | 7590        | 03/10/2006           | EXAMINER            |                  |
| NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION |             |                      | BUI, BRYAN          |                  |
| P.O. BOX 506                                    |             |                      | ART UNIT            | PAPER NUMBER     |
| MERRIFIELD, VA 22116                            |             |                      | 2863                |                  |

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                           |  |
|------------------------------|------------------------|---------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>       |  |
|                              | 10/710,507             | HUANG ET AL. <i>(pre)</i> |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>           |  |
|                              | Bryan Bui              | 2863                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-17 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 8-13 is/are allowed.
- 6) Claim(s) 1-5 and 14-16 is/are rejected.
- 7) Claim(s) 6,7 and 17 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date: ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Prior art submitted (figures 1-3 and under section of Description of the Prior Art), herein after APA, in view of Wang et al (US 6944109).

With respect to claims 1 and 14, APA discloses in figures 1-3, the features of the claimed invention for testing an optical disc drive control PCB using a reference optical pick-up head (figure 1) comprising determining a value by comparing an output of an optical disc drive control PCB under test to an output of a reference optical pick-up head laser (paragraph 0014); comparing the value to a predetermined (reference/threshold) value and accordingly determining whether the optical disc drive control PCB under test is acceptable (figure 2, between acceptable range 24 and 25). Note that APA does not mention a step for comparing the value to a predetermined value clearly. However, APA in figure 2 discloses the driving and controlling circuitry of the optical disc drive control PCB can adequately control laser power within predefined limits, and the corresponding between disc drive control PCB output characteristic by OPU laser power and OPU laser drive current using a reference laser (paragraph 0015). It would have been obvious to one of ordinary skill in the art to modify APA' s teachings to includes the

comparing the OPU output value with the reference value such a function for determining the acceptable limits of the optical disc drive control PCB under test as disclosed in APA (paragraph 0015) to indicates the laser power output to drive current for test in acceptable range.

With respect to claim 2, further comprising a step for adjusting the output of the optical disc drive control PCB (paragraph 0015).

With respect to claim 3, wherein the output of the reference optical pick-up head is from light emitted to a surface of an optical disc then reflected back to the optical pick-up head (figure 3, paragraph 0019).

With respect to claims 4 and 15, APA discloses determination of acceptability of the optical disc drive control PCB under test (figure 2, paragraph 0015). APA does not mention about generating a pass/fail indication. However, the indication in acceptability of the optical disc drive control PCB under test is appreciated by one of the skill in the art to applying by using photo-detector as optoelectronic coupler consisting of LED for indicator that discloses in an optical pick up device as well known in the art when the value inside the range limits or outside the range (figures 2-3).

With respect to claims 5 and 16, APA further comprising generating a graphical characterization of the comparison of the measured value to the predetermined value (figure 2).

***Allowable Subject Matter***

3. Claims 6-7 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims which includes disconnecting the optical disc drive control PCB under test from the reference optical pick up head when the test is complete; wherein the test assembly further comprises a means of presenting guiding instructions to assist in the adjustment of the optical disc drive control PCB under test.
4. The following is a statement of reasons for the indication of allowable subject matter: Claims 8-13 are indicating allowable over the prior art of record because in combination with other limitations of the claim, the prior art fails to disclose when the test is complete disconnecting the optical disc drive control PCB under test from the reference optical pick up head.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Bui whose telephone number is 571-272-2271. The examiner can normally be reached on M-Th from 7am-4pm, and Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRYAN BUI  
PRIMARY EXAMINER

BB

3/6/2006

